

Accessing and Using HPMS Data

Follow the guide below to import HPMS layers into your GIS software of choice. Instructions on how to import a single layer, quickly import multiple layers, and save a layer to your desktop are available for ArcGIS Pro and QGIS. The instructions were developed using ArcGIS Pro version 2.8.0 and QGIS version 3.22.5. For different versions screenshots may look slightly different, but the general instructions should remain the same.

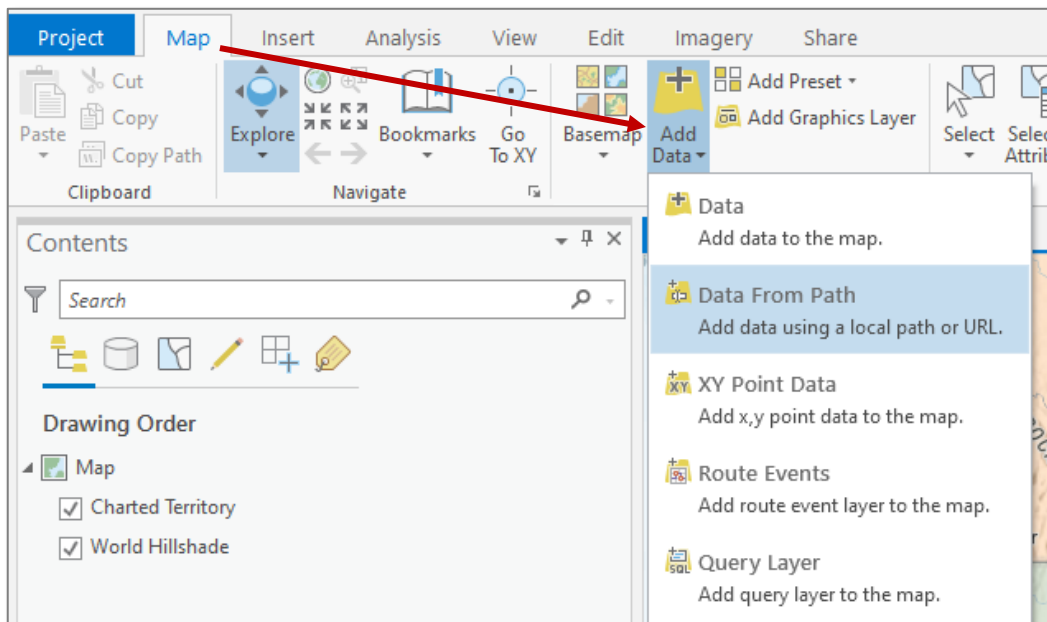
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ArcGIS Pro

Importing a Single Layer

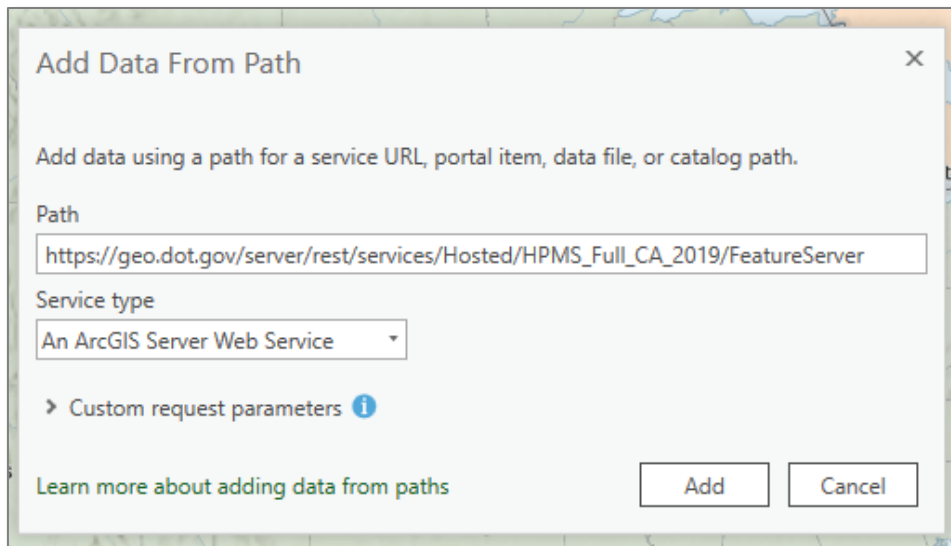
1. For these instructions you can use an existing map project or create a new blank map project from the ArcGIS Pro initial screen. If creating a new project, you will need to choose a project name and a file location. Once you have created or opened a map project, navigate to **Map > Add Data > Data from Path**.



2. In the **Path** textbox insert your REST service URL obtained from using the dashboard on [this website](#). To copy the rest service URL, select (click) the link created in the dashboard and this

will open the link in a new tab. From there, copy the URL. Under **Service type**, ensure **An ArcGIS Server Web Service** is selected. (See example below)

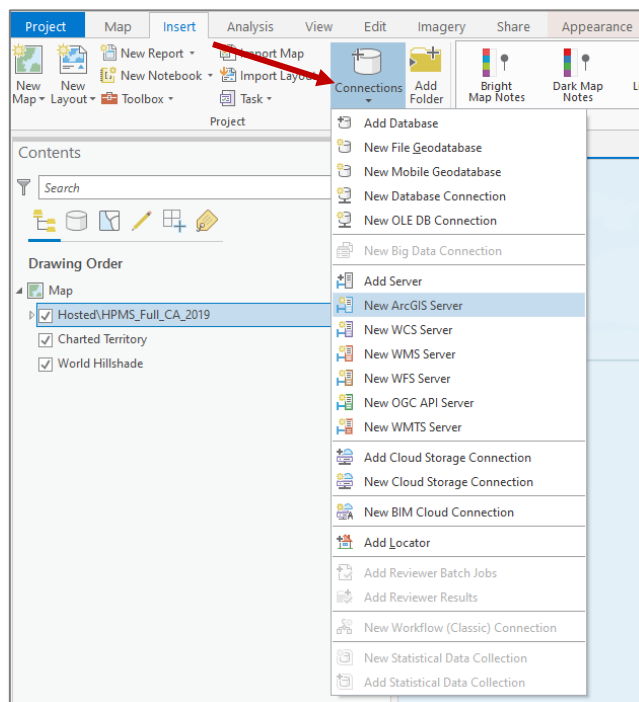
3. Select **Add**.



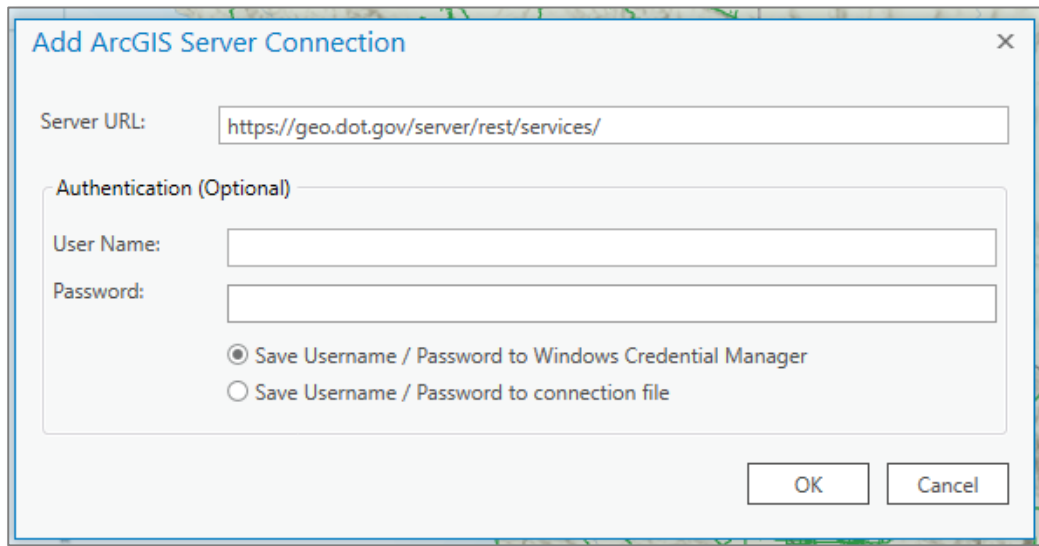
Importing Multiple Layers

You can also choose to connect to the overall Department of Transportation server in order to more quickly select more than one layer to import into ArcGIS Pro.

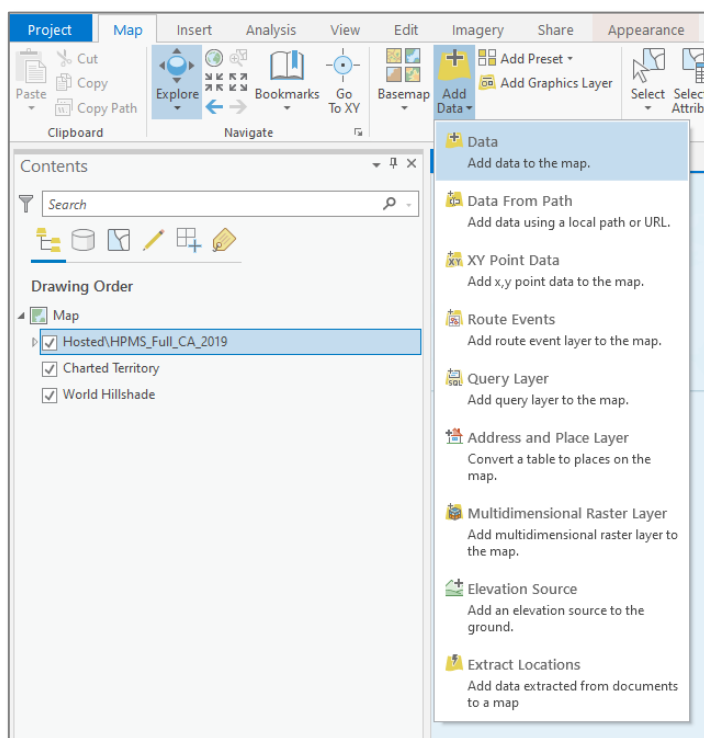
1. Navigate to **Insert > Connections > New ArcGIS Server**. Note that in some versions of ArcGIS Pro, **New ArcGIS Server** can sometimes appear under **Insert > Connections > Server**.



2. For the **Server URL** insert geo.dot.gov/server/rest/services/ after https://
3. Leave all other fields empty and select **Ok**.

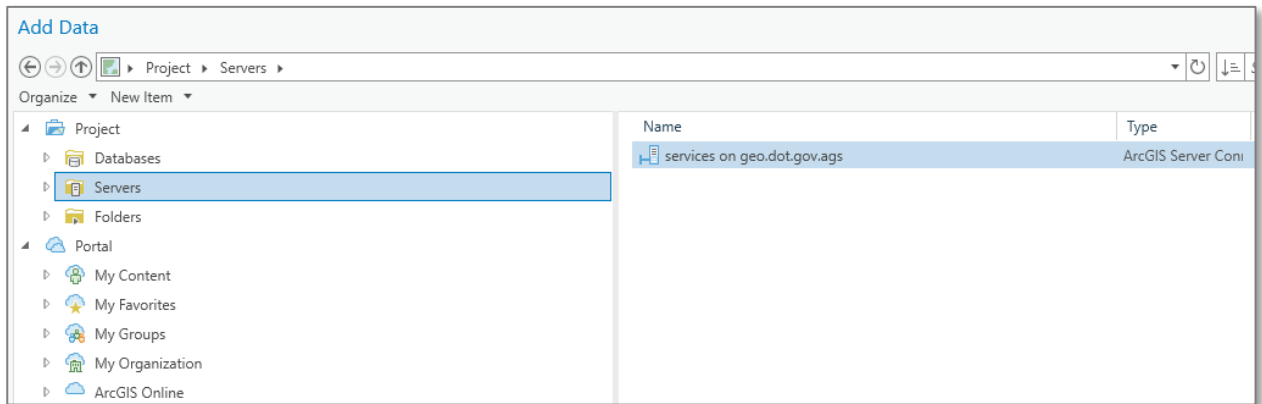


4. If you are prompted to sign into an account, you may simply select the **X** button. Note you are not required to sign into an Esri account in order to access the data.
5. To then add layers from the server, navigate to **Map > Add Data > Data**. This will open a new dialogue window.

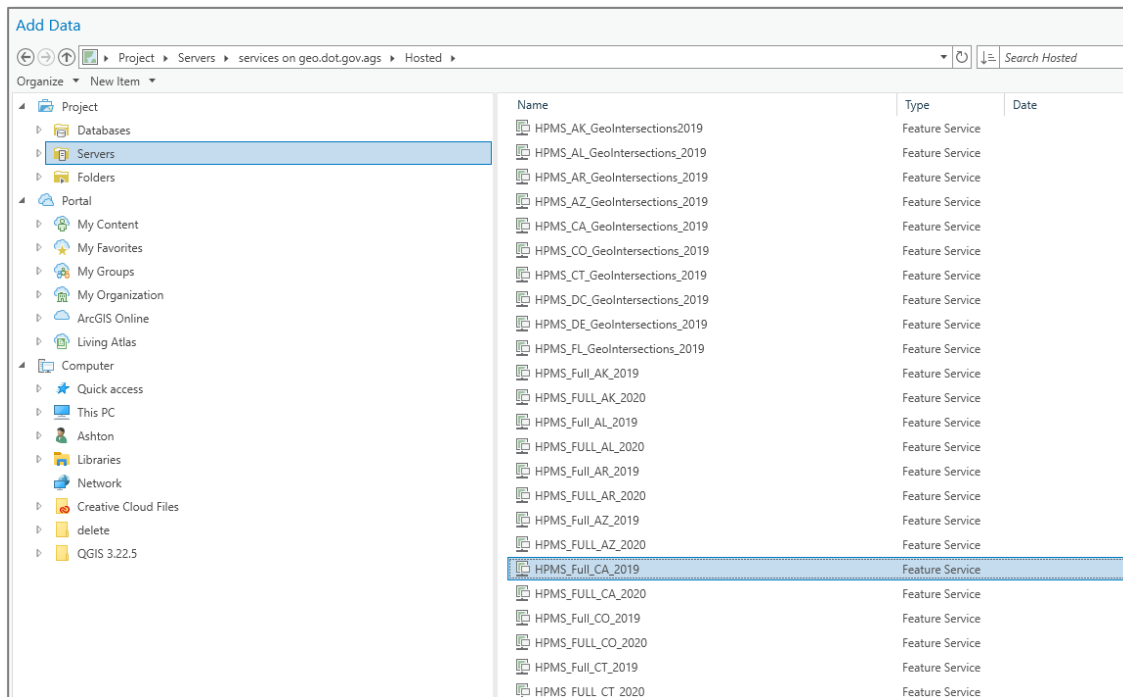


6. On the left-hand side select (double click) **Servers**.

7. Select the DOT server (it will usually be named services on geo.dot.gov.ags).



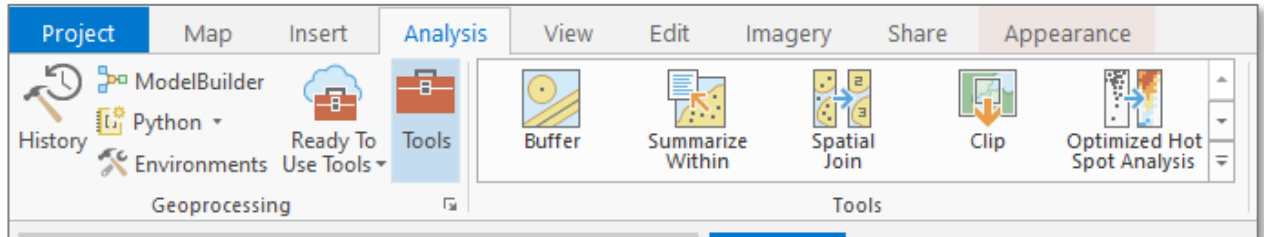
8. Select **Open**.
9. Open the **Hosted** folder.
10. From here, find the name of your desired layer. You can find this by looking at your REST service URL, obtained from using the dashboard on [this website](#), and looking for the text after /Hosted/. Note that the indexing may take a minute to load.
- 2018 HPMS data follows the naming convention **StateName_2018_PR**.
 - 2019 HPMS data follows the naming convention **HPMS_Full_STATEABBREVIATION_2019**.
 - 2020 HPMS data follows the naming convention **HPMS_FULL_STATEABBREVIATION_2020**.



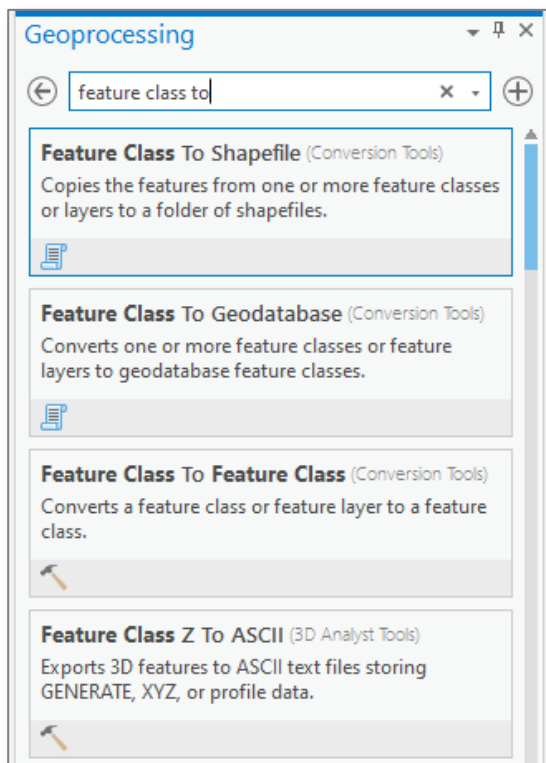
11. After selecting your layer(s), using CTRL + select if you'd like to select multiple, select **OK**.

Saving a Layer

1. Navigate to **Analysis > Tools**. Selecting **Tools** will open a new window on the right-hand side of the screen.

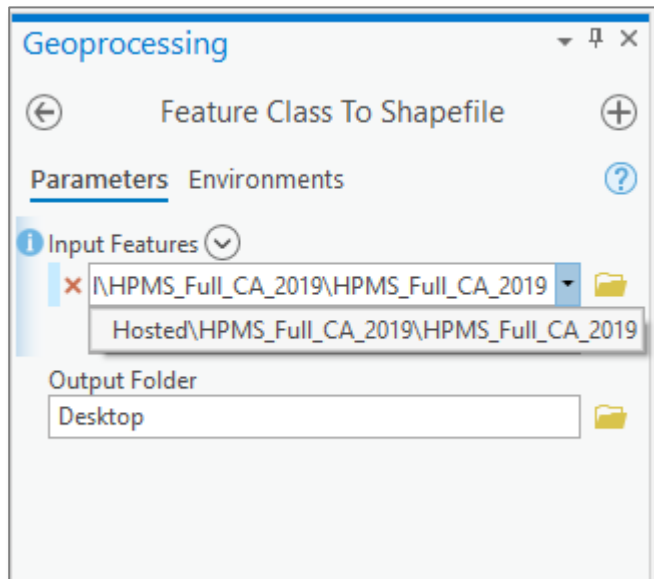


2. Search for “feature class to” and select your chosen format (ex: Feature Class to Shapefile)



3. Select your layer from the **Input Features** dropdown.

4. Select the folder next to the **Output Folder** textbox and navigate to where you'd like to save your layer. Select **Ok**.

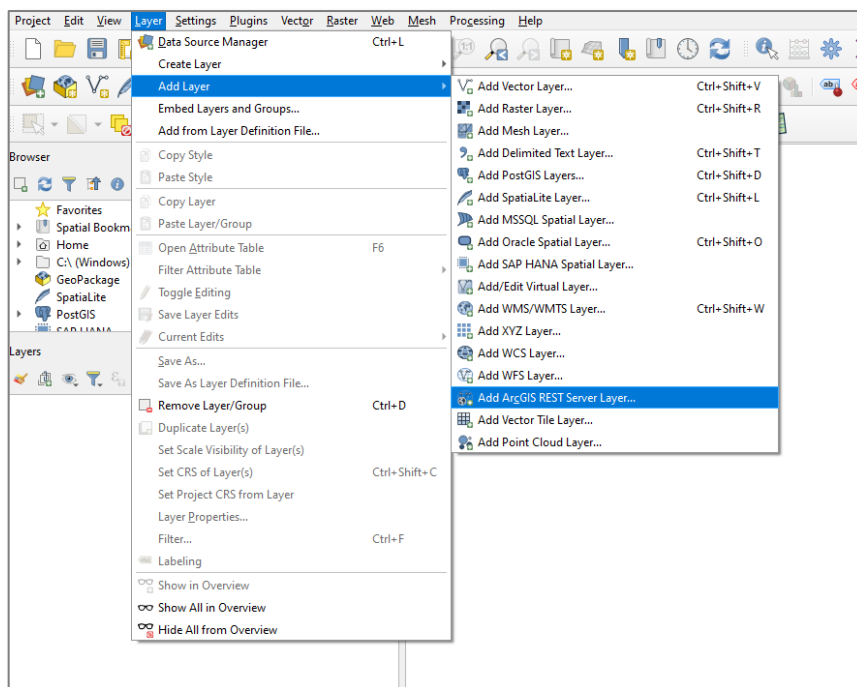


5. Select **Run**.

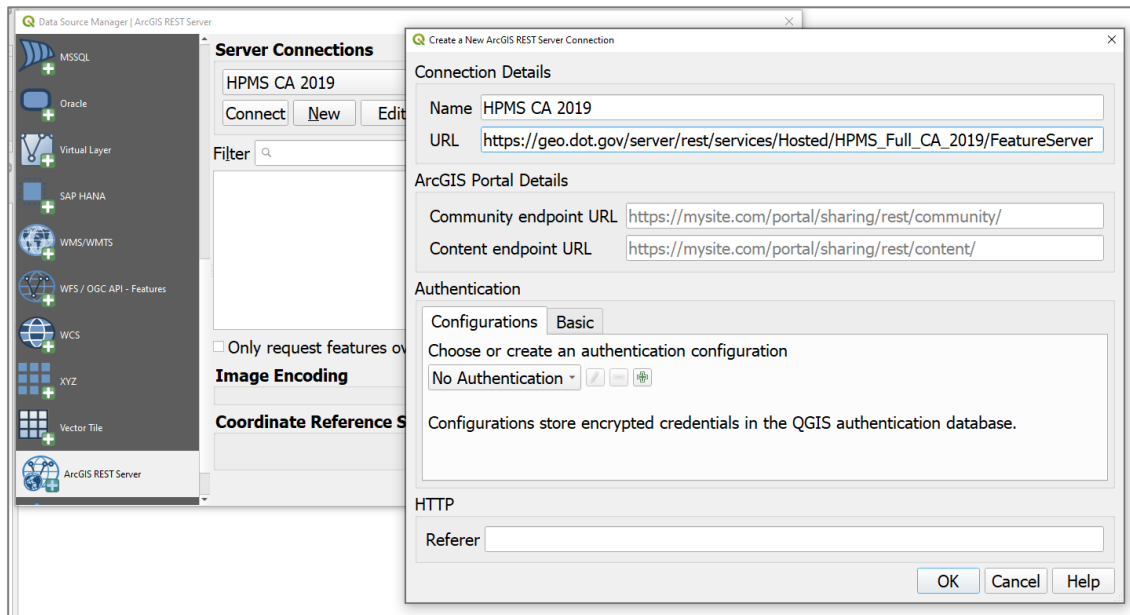
QGIS

Importing a Single Layer

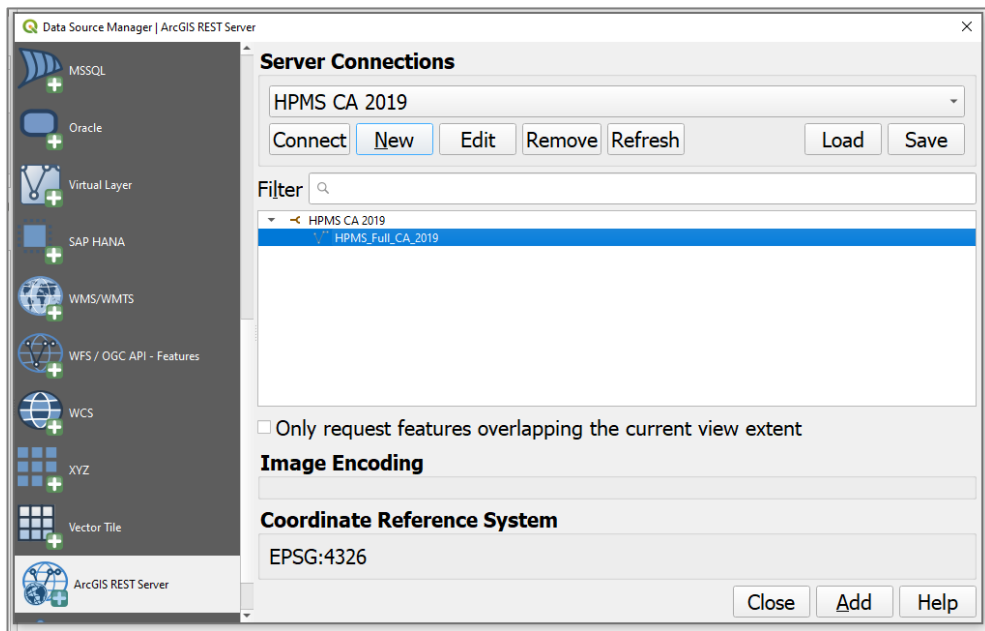
1. Open QGIS and navigate to **Layer > Add Layer > Add ArcGIS REST Server Layer**.



2. Create a new connection by selecting **New**.
3. Under **Connection Details** choose a name (i.e. HPMS CA 2020)
4. Under URL copy and paste your REST service URL obtained from using the dashboard on [this website](#).
5. Leave all other fields blank and select **OK**.



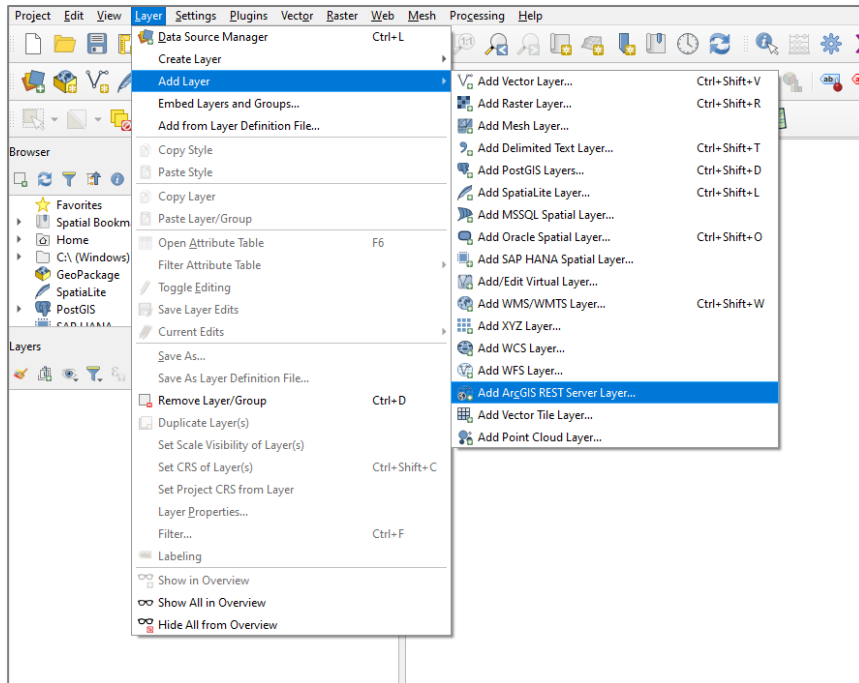
6. Your connection will now appear under the **Server Connections** dropdown.
7. Select **Connect** and then **Add**.
 - a. Note: Due to the large size of the HPMS files, it may take time for the full layer to load.



Importing Multiple Layers

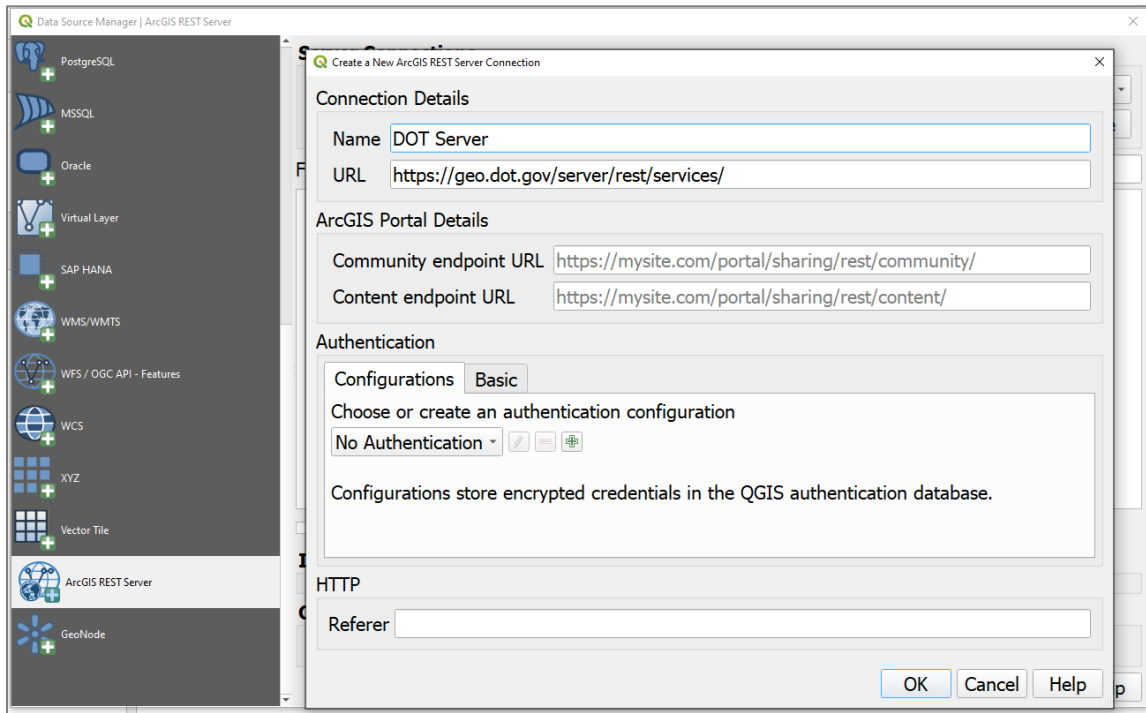
You can also choose to connect to the overall Department of Transportation server in order to more quickly select more than one layer to import into QGIS.

1. Open QGIS and navigate to **Layer > Add Layer > Add ArcGIS REST Server Layer**.

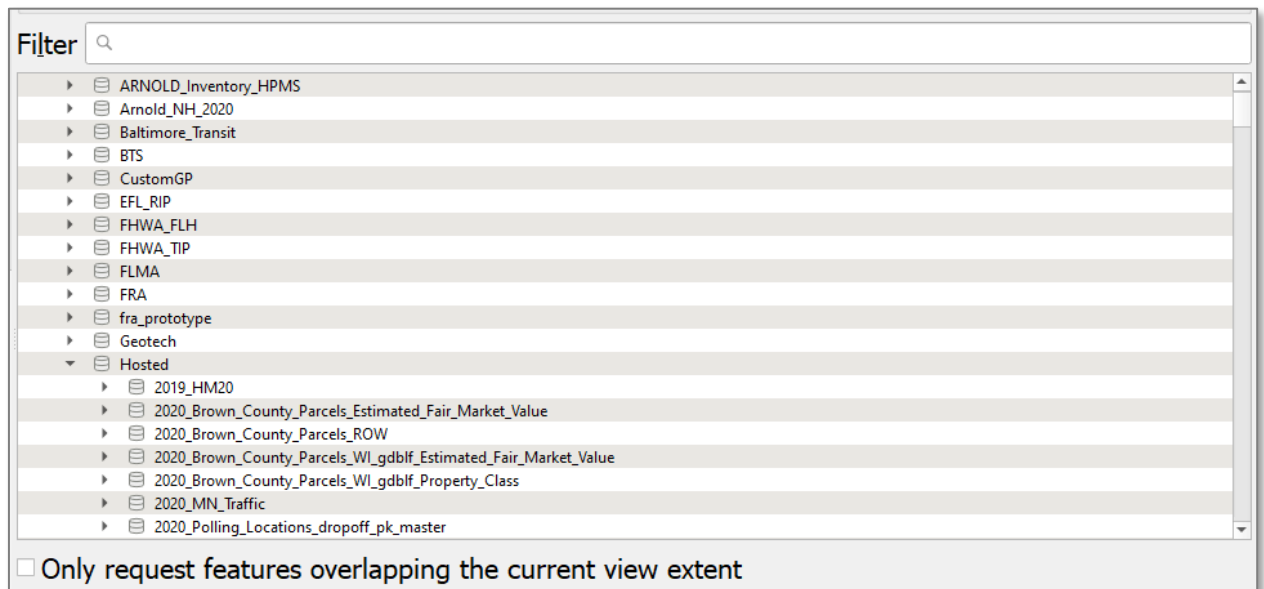


2. Create a new connection by selecting **New**.
3. Under **Connection Details** choose a name (i.e. DOT Server)
4. Under URL insert <https://geo.dot.gov/server/rest/services/>.

5. Leave all other fields blank and select **OK**.



6. Your connection will now appear under the **Server Connections** dropdown.
7. Select **Connect**.
8. Open the **Hosted** folder.

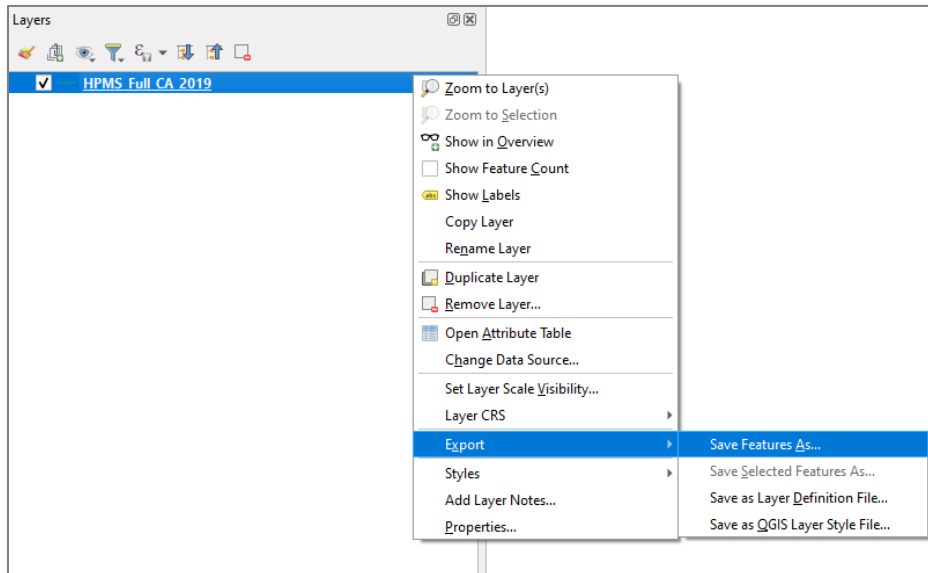


9. From here, find the name of your desired layer. You can find this by looking at your REST service URL, obtained from using the dashboard on [this website](#), and looking for the text after /Hosted/.
 - a. 2018 HPMS data follows the naming convention **StateName_2018_PR**.
 - b. 2019 HPMS data follows the naming convention **HPMS_Full_STATEABBREVIATION_2019**.

- c. 2020 HPMS data follows the naming convention
HPMS_FULL_STATEABBREVIATION_2020.

Saving a Layer

1. If you need to save a copy of the layer to your desktop, do this by right selecting the layer name in the **Layers** pane and selecting **Export > Save Features As**.



2. Select your file format, and then select the three dots next to **File name** to navigate to the place you'd like to save the layer to.
3. Select **Save**.
 - a. You can leave all other options as is. Note that if you only need a subset of layer fields, you can select which fields to save under the “Select fields to export and their export options” header. Fewer fields will reduce the layer size and can help with loading time.

